



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,631	08/28/2001	John E. Hogan	37-53	4544

23117 7590 06/26/2003
NIXON & VANDERHYE, PC
1100 N GLEBE ROAD
8TH FLOOR
ARLINGTON, VA 22201-4714

EXAMINER

TADESSE, YEWEBDAR T

ART UNIT	PAPER NUMBER
----------	--------------

1734

DATE MAILED: 06/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/939,631

Applicant(s)

HOGAN ET AL.

Examiner

Y webdar T Tadesse

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) 1-26 and 60-64 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 65-93 is/are allowed.
- 6) ☒ Claim(s) 27-59 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 08/999,564.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Applicant's election of Group III in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Information Disclosure Statement

2. Copies of chemical abstracts Vol.120, No.20, (1994), Grosvenor M.P. Diss. Abstr. Int., Vol.53, No. 7 (1991) Bath, p. 3492, Grosvenor M.P and Kirk-Othmer Encyclopedia of chemical Technology, Vol. 19, 3rd Ed., p. 1-2 (1982) appear to be missing from the parent application file-wrapper of serial No. 08/999,564 and 09/939,631. Applicants are requested to submit copies of these documents in order to be considered by the examiner.

Specification

3. Claims 65 and 76 are objected to because of the following informalities: In claim 65, line 11, after the word "difference" the word "to" is misspelled. In claim 76, line 2, after the word "station" the word "for" is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

Art Unit: 1734

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 31-34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure does not indicate how to electrically isolate the substrate from the support surface while maintaining a potential. The support surface is disclosed as part of the electrode in electrical contact with the substrate (applicant's specification, page 5). The disclosure fails to describe how to isolate the substrate while providing a potential.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 27-59 are rejected under 35 U.S.C. 112, -second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 27, it is unclear what is intended by "electrically isolated from its surroundings". It is unclear what is included in the surroundings. The specification indicates a substrate in free fall is isolated from its surroundings (spec, page 5) –however the substrate is not electrically insulated from the air it is falling through which would appear to be part of the substrates "surroundings". The specification goes on to indicate the substrate may be in contact with an electrode or sit in a depression of a conductive material (spec, page 5). These support structures

Art Unit: 1734

are part of the substrates "surroundings" and are not electrically isolated from the substrate. It's noted the specification defines the surroundings as including the support surfaces (spec, page 5, and lines 19-20).

In claim 31, the substrate is required to be isolated from the support surface. However, claim 27, from which claim 31 depend, requires means for holding a substrate and a coating material at a potential difference to each other. The only means disclosed for holding the substrate at a potential difference are electrodes in electrical contact with the substrate. The support surfaces are disclosed as part of the electrode and, as such, claim 31 is in conflict with claim 27, which renders the claim indefinite.

In claim 39, "the fusing station" has no proper antecedent basis.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 27-28, 35, 41, and 43-44 are rejected under 35 U.S.C. 102(b) as being anticipated by applicants' admitted prior art (spec. pages 1-2, lines 12-26 and 1-10 respectively). Applicants' admitted prior art teaches that tablet cores are earthed for example carried on an earthed conveyor belt, a powdered coating material is directed at them through a nozzle and the powder coating is then fused to uniformly coat.

Additionally, admitted prior art teaches moistening the cores with water prior to spraying with the charged powder improves the earthing of surface of the core.

10. Claims 27-28, 31-39 and 43-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Staniforth et al (US 5,470,603).

Regarding claims 27-28 and 35, Staniforth et al disclose (see column 2, lines 8-16) an apparatus for electrostatic coating of substrates of medicinal products in which the conveying means and/or the substrates are maintained at a different electrical potential from the dry powder. It is noted, the substrates are "electrically isolated" from the surroundings as defined by applicant's specification.

Regarding claims 33-34, Staniforth et al disclose plurality of electrodes provided above the conveying means and maintained at a selected potential which would normally be of the same sign as that of the powder (see column 3-4, lines 66-67 and 1-13 respectively).

As to claims 36-39 Staniforth et al disclose an infra red heater 13, to fuse the powder onto the substrates and a cooling step in which the coated tablets are cooled and solidified (see Fig 1-2 and column 7, lines 25-38).

Regarding claims 43-48, Staniforth et al disclose electrodes (11 and 18) to contact substrates in the coating station, a conveyor belt (1) continuously moving through coating, fusing and cooling stations (see Fig 1).

11. The following is a quotation of 35 U.S.C. 103(a), which forms the basis for all obviousness rejections, set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staniforth et al as applied to claim 27 above and in view of Pan (US 4,427,712).

Staniforth et al do not disclose an electric field-shaping device surrounding the substrate. Pan discloses (see Fig 3 and columns 6-7, lines 58-62 and lines 25-30 respectively) an electric field shaping (grid 36) shaped so as to provide selective coating of non-conductive and conductive, discrete substrates (column 3, lines 24-27). It would have been obvious at the time the invention was made to include an electric field

Art Unit: 1734

shaping in Staniforth et al to vary the coating weight on an object to be coated as disclosed by Pan.

13. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Staniforth et al as applied to claim 27 above and in view of Van Pelt (US 5,615,614). Staniforth et al do not recite a cooling station the type of applicant claims an air blower. However, cooling provided by air blowers are well known and conventional as shown by Van Pelt discloses (see and column 6, lines 29-33). It would have been obvious at the time the invention was made to use a cooling station with an air blower in Staniforth et al to cool the substrates. Additionally, one would be motivated to select an air blower for cooling for its simplicity.

14. Claims 41 and 49 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Staniforth et al.

Staniforth et al teach moistening the exterior of the substrate prior to application of powder makes the substrates more electrically conducting (see column 4, lines 18-2) and is considered to disclose a preconditioning station as claimed. In any event one in the art would appreciate providing a preconditioning station prior to a coating station in Staniforth et al device to achieve more electrically conducting substrates. Therefore, it would have been obvious at the time the invention was made to include a moistening step in Staniforth et al to facilitate the application of powder to the core as suggested by Staniforth et al.

Regarding claim 42, an electrostatic spray gun for supplying the liquid, one in the art would be motivated to do so to take advantage of the uniform application of liquid on the substrates by an electrostatic gun.

Allowable Subject Matter

15. Claims 65-93 are allowed.
16. Claims 50-59 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, -second paragraph, set forth in this Office action.
17. The following is a statement of reasons for the indication of allowable subject matter: As to claims 50-59, prior art of record does not teach or suggest apparatus for electrostatically coating an electrically poorly conducting substrate comprising, among others, a rotating drum for treating and conveying substrates, having depressions as part of a respective moving electrode in the surface of the drum, a first and a second arcuate stationary electrodes disposed inside the drum and as the drum moves through the treating station the moving electrode is in contact with the stationary electrode. With respect to claims 65-93, prior art of record does not disclose or suggest an apparatus for electrostatically coating electrically poorly conducting substrates, comprising, among others, a plurality of individual locations defined over a surface of the conveyor, each adapted to receive a respective substrate (depressions formed in a surface of the conveyor each the depressions being for the reception of respective substrates), and a plurality of electrodes, each positioned at a respective one of the individual locations

Art Unit: 1734

(depressions) for holding a respective substrate substantially electrically isolated from adjacent regions of the surface of the conveyor, the supply of particulate coating material and the electrodes being arranged to hold a substrate to be coated and particulate coating material at a potential difference to each other at a coating station.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yewebdar T Tadesse whose telephone number is (703) 305-3539. The examiner can normally be reached on Monday-Friday 8:00 AM-4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Yewebdar T-T
YTT
June 25, 2003

J.A. LORENZO
J.A. LORENZO
PRIMARY EXAMINER